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4.0 Introduction

This chapter discusses participation in the Voluntary Remediation Program (VRP). Requirements for VRP participation are established in Indiana Code (IC) 13-25-5, the Voluntary Remediation Agreement (VRA), the voluntary remediation work plan, and the Risk Integrated System of Closure (RISC) Technical Guide and User's Guide. Pursuant to IC 13-25-5-7, RISC provides the guidelines by which the Indiana Department of Environmental Management (IDEM) will evaluate investigation and voluntary remediation work plans. The VRP provides a process for property owners, operators, potential purchasers, and third parties (participants) to voluntarily enter into an agreement with IDEM to address contaminated property. IDEM issues a Certificate of Completion and the Governor's office issues a Covenant Not To Sue to VRP participants for successfully remediated properties. These documents provide assurance that the voluntary actions will not become the subject of future IDEM enforcement. In addition, a Memorandum of Agreement with the U.S. Environmental Protection Agency (U.S. EPA) provides increased assurance that U.S. EPA will not pursue an enforcement action under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA or "Superfund").

The VRP was established in 1993 in response to the growing need for IDEM review and oversight of voluntary investigations and remedial actions. Indiana is thus one of the first states to pass legislation to address liability issues associated with buying, selling, and developing property contaminated by petroleum or hazardous substances. Facilitation of property transfers is a recognized benefit of successful completion of the VRP process.

Because participation in the VRP is optional, a participant can terminate a project at any point upon written notification to the VRP project manager. Property owners, potential real estate purchasers, lending institutions, and property developers benefit from the flexibility allowed for achieving project closure and the voluntary nature of the VRP. Program participation also benefits Indiana's environment through the identification and remediation of contaminated property that otherwise may not be addressed.

4.1 Eligibility

With the exceptions listed below, any person who has established property control or access and who wishes to investigate and remediate property that has been contaminated with petroleum or hazardous substances is eligible to participate in the VRP. Multiple parties can

apply to the program as co-applicants. Applicants may be deemed ineligible for VRP participation if one or more of the conditions below apply.

- A State or federal enforcement action is pending concerning the remediation of hazardous substances or petroleum described in the application.
- A federal grant requires an enforcement action at the site.
- The condition of the hazardous substances or petroleum described in the application constitutes an imminent and substantial threat to human health or the environment.
- The application form is not complete.

Applicants that have already completed remediation efforts are also potentially eligible for the VRP provided that none of the criteria listed above applies. Consistent with requirements in IC 13-25-5-7(c), participants must submit documentation that project closure activities satisfy VRP reporting and performance requirements and are consistent with RISC. If a project enters the VRP after remediation is complete or after an investigation suggests that no further action is required, IDEM still requires the collection of confirmation samples to determine if remedial objectives have been achieved. The purpose of confirmation sampling is not to recharacterize the area but to gather a limited number of samples to confirm previously submitted results.

4.2 Application Process

The first step in the VRP application process is to complete and submit a VRP application form with a $1,000.00 application fee. Political subdivisions are not required to submit a fee. Application forms are available at IDEM's Office of Land Quality and online at http://www/state.in.us/idem/olq/programs/vrp/index.html. Upon receipt of the fee, the Cashier's Office will provide a receipt to the applicants. The VRP cannot process the application until the fee is received. This fee is held until project completion or termination, after which time it will either be refunded in full or applied toward any outstanding payments. The unexpended portion of the application fee will be refunded.

The second step in the application process begins with the assignment of a unique project number to the application form and concludes with an internal agency enforcement check concerning the proposed VRP project.

Information provided on the application is used to determine an applicant's eligibility in the VRP. It also identifies the VRP applicant, provides an initial summary of project conditions, and preliminarily

defines the scope of the investigation and remediation. Pursuant to IC 13-25-5-2, the application is confidential until IDEM and the applicant sign the VRA.

The VRP has 30 days to determine the eligibility of an applicant based on the criteria listed above. Incomplete applications will be returned to the participant within 45 days of receipt with missing information identified. After the appropriate revisions have been made, a participant may resubmit the application. A resubmitted application does not require an additional application fee. Upon application approval, the VRP will send a formal acceptance letter to the applicant contact person identifying the assigned VRP project manager.

4.3 Voluntary Remediation Agreement

Shortly after the participant is accepted into the program, the project manager will send the participant a standard VRA and a nonbinding VRP oversight cost estimate. The VRA is a standard document that identifies the obligations of both the participant and IDEM. During the investigation VRP participants are expected to adhere to the standards set forth in the VRA. The participant can sign the VRA and return it to the VRP for final approval or suggest a modified VRA. In some cases, IDEM may agree to make project-specific alterations to a standard VRA. Of course, many aspects of the program are governed by statutes and cannot be altered by the VRA. However, circumstances may make changes to the VRA mutually beneficial. One such case involves a non-owner VRP participant. If a previous owner wishes to remediate property currently owned by another party (or about to be purchased by a prospective purchaser), the VRA can be changed to extend temporary liability coverage to the current owner. Also, at the participant's discretion, the VRA can be revised to specify more stringent closure requirements. Such changes can be useful during property transfer.

The participant's name will be listed in the caption and signature block of the VRA. The VRA, Certificate of Completion, and Covenant Not To Sue will be issued in the name of the participant as it is indicated in the application. If the participant wishes to have the Certificate of Completion or the Covenant Not To Sue issued to a party other than the participant, the participant must indicate this preference on the application or on the VRA so that appropriate steps can be taken.

The participant must submit a proposed remediation work plan (see Appendix 1.2 of the RISC User's Guide) no later than 180 days after the VRA is signed. An extension may be granted and reflected in the VRA if mutually agreed upon by the VRP and the participant. In addition, the participant will agree to reimburse IDEM for costs incurred to review work plans and reports and to provide project oversight. The VRA will provide the participant with an estimate of review and oversight costs and a payment schedule. The VRA also establishes deadlines for the completion of milestone tasks.

4.4 Program Limitations

Although the VRP can be used to address most contamination scenarios, it is inappropriate in some cases. All limitations are based on the program's statutory framework, which may prevent a participant from completing the VRP. Examples of such limitations are discussed below.

4.4.1 Off-Site Source of Contamination

If the participant cannot or does not desire to gain access necessary to remediate an off-site contamination source, the participant will have difficulty performing the investigation and remediation necessary to obtain a Certificate of Completion and a Covenant Not To Sue. If a source of ground water contamination is not on the participant's property and either property access or control is not desired or provided to the VRP participant, the participant's site may qualify under IDEM's "Property Containing Contaminated Aquifers" nonrule policies, OER-0008-NPD, 20 Ind. Reg. 1674 (March 1, 1997) (for hazardous substances or petroleum), or WASTE-0038-NPD, 23 Ind. Reg. 2141 (May 1, 2000) (for underground storage tanks [UST]). These policies state that if certain conditions are met, IDEM will decline to bring an action against a qualified site.

4.4.2 Resource Conservation and Recovery Act

The VRP may not be appropriate for meeting obligations or responsibilities under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901 *et seq*. (United States Code). Obligations that may preclude VRP participation can encompass the duty to meet any permit conditions, including, but not limited to, financial responsibility, closure, post-closure, or corrective action requirements. In addition, neither IC 13-25-5-18(e), the Certificate of Completion, nor the Covenant Not To Sue can prevent IDEM from bringing an enforcement action to compel the VRP participant to perform closure, post-closure, or corrective action, even if the remediation work plan addresses the contaminants or property. However, the VRP process

can be used in conjunction with formal or informal resolution of these issues.

4.4.3 Natural Resource Damages

Neither the VRA, the Certificate of Completion, nor the Covenant Not To Sue relieves the VRP participant of any natural resource damage liability under the following authorities: 42 U.S.C. 9601 *et seq.* (CERCLA); 33 U.S.C. 2701 *et seq.*; IC 13-25-4-8; and Indiana common law. Natural resource damage liability applies even if the remediation work plan or VRA addresses natural resource damages.

4.4.4 Other Limitations

The participant can be removed from the VRP for failure to (1) submit a remediation work plan in a timely manner, (2) substantially comply with the work plan, or (3) pay IDEM's administrative costs. Although the VRP does not require the participation of other regulatory programs, it may be possible to fulfill another program's requirements under the VRP. Because each regulatory program has its own requirements, prospective VRP participants should check with the appropriate program personnel or seek an attorney to discuss these requirements.

4.5 Participant Benefits

Program participants enroll in the VRP for different reasons, but a common goal of all participants is to reduce liability for property contaminated by petroleum or hazardous substances. The Certificate of Completion and the Covenant Not To Sue provide assurance that the voluntary actions will not become the subject of future IDEM enforcement. In addition, a Memorandum of Agreement with the U.S. Environmental Protection Agency (U.S. EPA) provides assurance that U.S. EPA will not pursue an enforcement action under the CERCLA with respect to remediation conducted under the VRP.

The flexibility of the VRP allows participants to choose to remediate less than all of the potential contamination on their properties and, within reason, set their own timetables for remediation completion. These considerations influence the resulting liability coverage and are best formulated prior to formal VRP enrollment. Participation in the VRP can increase the value of land and provide a means for responsible parties to address contamination caused on other properties. The VRP can also reduce the threat of federal enforcement actions and facilitate property transfers. Examples of such benefits are discussed below.

4.5.1 Reduce Threat of Federal Enforcement Actions

As stated above, the Memorandum of Agreement states that when an environmental project in Indiana has been issued a Certificate of Completion for the project, U.S. EPA Region 5 will not plan or anticipate any federal action under CERCLA. This assurance remains applicable unless exceptional circumstances cause the project to pose an imminent and substantial threat to human health or the environment. In all cases, the U.S. EPA Region 5 decision will be based strictly on information available at the time of IDEM's determination. This provision does not extend to sites listed on the National Priorities List (NPL) or currently subject to orders or enforcement actions under CERCLA. More information about the Memorandum of Agreement is available at the following Internet address: www.state.in.us/idem/olq/programs/vrp/vrp_moa.pdf.

U.S. EPA will continue to work with IDEM to address any concerns associated with federal activity under CERCLA so as to encourage the financing, transfer, and appropriate redevelopment and use of industrial and commercial properties. In addition, U.S. EPA will continue to provide technical assistance and, at its discretion, financial support to local and State government in order to facilitate the revitalization of contaminated or potentially contaminated properties in Indiana.

4.5.2 Facilitate Property Transfer

The VRP is useful for facilitating property transfers. The flexibility of the VRP allows the participant to propose a voluntary remediation work plan that will provide the desired level of coverage. It is up to the participant and other parties interested in the property transfer to (1) propose the scope of work associated with the property, (2) identify areas to be addressed (which determines liability coverage), and (3) decide when in the VRP process to transfer the property.

The VRA can be altered to allow the parties to reference the VRA in a property transfer agreement. In addition, VRP staff can provide interested parties with a letter that updates the status of the project.

4.6 VRP Project Considerations

In addition to an understanding of the VRP's administrative steps, knowledge of RISC is paramount in defining the contamination and evaluating the risks associated with the property and in projecting

investigation and remediation costs. VRP provides the following options for managing risks posed by environmental contaminants:

- Using traditional remediation methods to achieve default RISC closure levels
- Developing appropriate closure levels using default and nondefault risk assessments
- Allowing higher levels of contamination to remain in place when exposure can be prevented

Program participants must also consider both VRP oversight costs and environmental consultant costs necessary to document remediation efforts. VRP oversight may require IDEM contractor involvement. The extent of technical support will depend on the anticipated complexity of the investigation and remediation as described in the VRP application. Generally, increases in project complexity and scope result in increased cost in order to demonstrate that closure levels have been met.

VRP and contractor technical reviews are more cost-efficient when participants follow the standard report outlines in Appendix 1 of the RISC User's Guide. Re-evaluating inadequate reports, expanding project scopes of work, and other additions all cause increased VRP oversight costs. The VRP remains sensitive to investigation and remediation cost burdens placed on participants and is committed to minimizing oversight costs.

VRP Process Overview

- ✧ Presampling Activities
- ✧ Optional Area Screening
- ✧ Investigation
- ✧ Remediation Work Plan Preparation
- ✧ CRP Preparation
- ✧ Remediation Work Plan Implementation
- ✧ Remediation Progress and Compliance Reporting
- ✧ VRP Closure Location Information
- ✧ Land-Use Restrictions
- ✧ Project Completion
- ✧ Closure Report Preparation
- ✧ Issuance of Certificate of Completion
- ✧ Issuance of Covenant Not To Sue

Because the VRP was designed to be a self-supporting program, participants will be assessed an additional amount of ten (10) percent of IDEM's total administrative costs. IDEM has determined that this is necessary for the effective implementation of VRP. Participants must pay all billed amounts before the Certificate of Completion and Covenant Not To Sue are issued. IDEM issues these documents as soon as the participant has performed the required work, regardless of whether final accounting of project costs has occurred. Therefore, project billing may continue even after the Certificate of Completion and Covenant Not To Sue have been issued.

If the VRP project is terminated for any reason, the participant agrees to reimburse IDEM for all of its administrative costs reasonably incurred to the time of project termination. IDEM agrees to reimburse the participant any unused portion of the application fee.

4.7 VRP Project Activities

VRP participants should begin project activities by determining which investigations and remediations are either required by regulations or warranted for the liability coverage sought. Presampling activities, area screening, and determination of the nature and extent of contamination are key in determining the appropriate course of action. Chapters 2, 3, and 4 of the RISC Technical Guide provide detailed guidance regarding these tasks. These and other VRP project activities are discussed below. In determining the scope of the project, participants should keep in mind that the Covenant Not To Sue will apply only to the chemicals and media addressed in the remediation work plan.

4.7.1 Presampling Activities

All appropriate RISC presampling activities discussed in Chapter 2 of the RISC Technical Guide are required under the VRP. VRP participants are required to evaluate potential source areas by compiling existing information about the site and surrounding areas. Efforts must be made to gather pertinent information concerning past site management practices and potential related impacts on human health and the environment.

Much of this information can be gathered during a Phase I investigation such as the widely recognized American Society for Testing and Materials' (ASTM) Phase I investigation (ASTM E-1527-97 or E-1528-96). The ASTM Phase I investigation can supplement information required by RISC guidance. Although no formal report is submitted during presampling or Phase I activities, the VRP will require the bulk of this information in an investigation report (see Appendix 1.1 of this User's Guide) or in the investigation portion of the voluntary remediation work plan.

Presampling activities can help define the project scope of work by identifying areas unlikely to be contaminated and areas known to be or that may be contaminated. Although the VRP Covenant Not To Sue will only cover areas actually investigated and, if necessary, remediated, presampling can be used to identify areas that do not pose a concern to parties involved in a real estate transaction. In addition, participants can focus their investigative and remediation efforts by considering area classifications along with the level of regulatory coverage desired and the type of remedy selected (such as project closure with or without institutional controls),. Presampling activities can also preliminarily identify the size of contaminant source areas. This is an important consideration when using the RISC default closure tables (see Appendix 1 of the RISC Technical Guide).

Contaminant source areas greater than 0.5 acre must either be characterized using the statistical methods discussed in Chapter 7 of the RISC Technical Guide or by using alternative statistical methods identified in the work plan.

Presampling activities also include determining the level of liability coverage desired, evaluating existing information, area classification, selecting the chemicals of concern and environmental media.

4.7.1.1 Determining Level of Liability Coverage Desired

The liability coverage granted through the VRP Covenant Not To Sue is limited to the matters addressed in the voluntary remediation work plan. The participant should propose the scope of work of the remediation work plan based on the level of liability coverage desired. Contamination can be "addressed" through risk assessment, active remediation, or a combination of risk assessment and remediation. Participants may address less than the entirety of a source area if adequate demonstration is provided to exclude chemicals of concern or particular environmental media.

Specific areas and COCs to be addressed must be identified in the voluntary remediation work plan, which is incorporated into the Covenant Not To Sue. If liability coverage is desired for a specific area, independent laboratory confirmation sampling is necessary to verify that the area meets appropriate closure objectives.

The remediation work plan must address contamination that emanates from a participant's facility, even if the contamination extends off of the "site" as specified in the VRP application. Although the VRP might not require remediation in all cases, the remediation work plan must identify and address all contamination exceeding residential closure levels. If the owner of a neighboring property will not grant property access for remediation, IDEM may work with the participant to gain access. If the participant cannot reasonably gain access to the neighboring property, IDEM may, at its discretion, allow the voluntary remediation work plan to address property controlled by the participant only. This will limit the resulting liability coverage to the work actually performed. This exception does not apply to off-site deed restriction or other land-use restriction requirements.

4.7.1.2 Evaluating Existing Information

To better identify applicable project objectives, the assessment of environmental conditions must address past and current site practices and associated environmental concerns. All existing data concerning environmental contamination should be assessed. Evaluating this information before sampling saves time and money because relevant information can lead to better project screening and sampling plans. Often, a Phase I environmental site assessment (ESA) has been performed on the property in accordance with ASTM guidelines (ASTM E-1527-97 or E-1528-96). An ESA report is an excellent source of background information. The ESA report can supplement additional information required by RISC guidance.

Participants may also use historical information to make management decisions concerning area classifications. A participant may choose to exclude parts of a site from sampling activities (such as screening, investigation, or confirmation) based on historical knowledge; however, the VRP will not extend liability coverage to the excluded areas. RISC allows the use of efficient and technically valid approaches to achieve either sitewide or incident-specific project closure.

4.7.1.3 Area Classification

During formulation of a project's investigation work plan, participants decide the classification of areas depending on the likelihood of contamination (known, unlikely, or may be). Area classifications should be initially based on historical records, knowledge of operational units and processes, and existing sampling information. This information can lead to more efficient sampling designs and can be modified as data become available. Based on the information gathered during the presampling investigation, all areas of the site must be classified into one of the following three categories:

- Areas unlikely to be contaminated
- Areas known to be contaminated
- Areas that may be contaminated

Areas unlikely to be contaminated are portions of a site where there is no reason to suspect contamination. Available historical site data is used to make this determination. Closure is not provided on these areas unless analytical information is obtained and made available for review.

Areas known to be contaminated are areas where contaminant releases are known to have occurred. Previous sampling data, records that document site contamination, visibly stained soils, soil odors, and other investigative data that indicate contamination can be used as a basis for this classification. If the nature and extent determination is complete, appropriate sampling data can be evaluated with regard to the direct contact and migration to ground water pathways. The variability of contaminant concentrations within a known area of contamination will dictate the scope of the sampling plan. Subsequent investigative efforts can focus on this area, providing a cost-effective means to limit future liability. Leaking underground storage tanks (LUST), past environmental spill locations, wastewater retention ponds, and aboveground storage tanks (AST) are all examples of common areas of known contamination or areas discovered to be contaminated during traditional environmental records research. As with other known areas of contamination, historical or currently known information (including information obtained through RISC screening) is often adequate to determine whether the areas will require additional investigation. Therefore, information required from VRP program participants primarily focuses on these sources of information.

Areas that may be contaminated are areas that cannot be classified in either of the other two categories. Significant data gaps or ambiguous or inconclusive information exists for these areas. Gas stations with UST closures, industrial process lines, and areas of unsubstantiated past environmental threats are all examples of areas that may be contaminated. Once identified as an area that may be contaminated, the area is screened and the screening results compared to RISC default closure levels to determine if further investigation is necessary. If the likelihood of RISC default level screening failure is great, the VRP participant may decide to skip area screening and proceed to defining the nature and extent of contamination (see Chapter 7 of the RISC Technical Guide.

Although choosing to address areas known to be contaminated may provide the initial impetus for entry into the VRP, it does not preclude IDEM from requesting an expansion of the VRP participant's investigation to include other potential environmental threats or impacts. Information gathered from historical records, knowledge of waste streams, and operational practices may be deemed a cause for further investigation. The potential for threats to human health or the environment is also considered just cause for IDEM to request an expansion of the investigation scope.

VRP participants have the choice of addressing the entire facility or specific source areas. If sitewide coverage is desired, the VRP will

assume that all areas under all three classifications will be addressed in the remediation work plan. All contaminants detected within these areas will be considered part of the scope of the remediation work plan, which must fully encompass the specific contaminant conditions associated with each area.

The participant can use screening and other methods to exclude portions of the facility from investigation and remediation. However, liability coverage under the Covenant Not To Sue will only extend only to areas actually addressed through sampling and, if necessary, remediation.

4.7.1.4 Selecting Chemicals of Concern and Environmental Media

The VRP provides a means to develop a flexible yet reasonable approach to including or excluding particular chemicals and environmental media (such as soil and ground water) from further investigation and remediation. The VRP approach of selecting COCs and environmental media can also be used by buyers and sellers of property and other interested parties to determine which areas of a facility require investigation and remediation.

Successful VRP Project Formulation Steps

1. Correctly select an area(s) for a soil and ground water investigation
2. Identify an inclusive preliminary chemicals of concern list for soil & ground water
3. Successfully demonstrate the elimination process for certain chemicals of concern and media from further investigative work
4. Coordinating area(s) confirmatory sampling events with VRP for project closure

IDEM's flexibility in allowing the selection of media and chemicals targeted for investigation is aimed at balancing the benefits of flexibility in voluntary cleanups with efficient and effective protection of human health and the environment. An area, medium, or chemical has not been "addressed" unless it is targeted for investigation and possible remediation under the voluntary remediation work plan. The participant can choose to investigate and address these areas, media, or chemicals in order to obtain liability protection for them.

Ordinarily, VRP participants address all of a known contamination event. VRP participants may also pursue closure for an entire facility, including areas unlikely to be contaminant sources and areas that could be contaminated (but are not known to be). Because the VRP process allows participants to select specific areas for environmental investigation and remediation, liability coverage can be provided only for the areas that have been investigated and, if necessary, remediated. Given a particular source area, participants can eliminate from further consideration chemicals of concern, environmental media, or exposure pathways by providing an adequate demonstration that they do not present an undue risk. Adequate demonstration must be consistent with RISC guidance.

A participant choosing to address a specific area must begin by determining all chemicals known or reasonably suspected to have been

released to the soil and ground water. The participant then creates a list of COCs. This initial list should include compounds used, treated, stored, or disposed of at the specific area(s). Chemicals reasonably suspected to have been released include all chemicals typically found with the release to be addressed (for example, benzene, toluene, ethylbenzene, xylene, and possibly methyl-tertiary butyl ether (MTBE) for petroleum storage tank releases) and breakdown or "daughter" products for each chemical known to be released. Appendix 4.1 of this User's Guide discusses specific categories of COCs for LUST petroleum projects. Specific chemicals can then be eliminated from further investigation under a variety of situations. Examples of such situations include:

- screening or other investigation (either during the VRP process or before entry into VRP) demonstrates that the chemicals are not located above cleanup objectives in soil or detected in ground water.
- the risk of exposure of humans and the environment to the chemicals is low based on current and future land use, considering land-use controls, laws, or other restrictions
- the participant cannot reasonably gain access to off-site property where the chemicals are located
- remediation is not technically or economically feasible.
- the participant is neither responsible for the contamination nor liable for cleanup under State or federal law

Participants may "adequately demonstrate" the elimination from further consideration of a particular medium or exposure pathway by establishing one or more of the following:

- the current degree of contamination or site conditions effectively deter contaminant transport to a particular medium
- there is a lack of contribution to or liability for contamination, such as contamination from an off-site source
- ground water contamination presents minimal risk to human health and the environment, considering ingestion of water, dermal exposure, indoor air, and surface water resources
- soil contamination risks presents minimal risk to human health and the environment, considering direct contact, ingestion, inhalation, or ground and surface water resources
- future land or ground water use restrictions or ordinances will limit exposure

During the compilation of information required for VRP reporting, adequate criteria for eliminating from further consideration a particular media will become apparent. Sampling data, historical information, and other report information can help build a case for demonstrating

that certain environmental media or exposure pathways can be eliminated. Ecological risks posed by the area or site must also be considered. Unsupported decisions not to address particular chemicals, contaminated media, or exposure pathways resulting from a release or area to be addressed will not be accepted because such decisions are not sufficiently protective of human health or the environment.

Participants have "adequately demonstrated" that a medium does not warrant further investigation if the particular medium has passed RISC screening. If participants choose not to conduct screening, the full nature and extent of contamination must be determined for either the area of a facility or the entire facility. The nature and extent determination may demonstrate that the proposed scope of the investigation can eliminate from further consideration certain media or exposure pathways. If a particular source area impacts surface and subsurface soil and contaminant concentrations are high enough to warrant ground water investigation, the VRP project manager has the discretion to request an expanded scope of work.

Specific areas and contaminants to be addressed will be documented in the remediation work plan, which is incorporated into the Covenant Not To Sue. If liability coverage is desired for a specific area, independent laboratory confirmation sampling is necessary to provide verification that the specific area meets appropriate closure objectives.

4.7.2 Optional Area Screening

Area screening is an option for all VRP participants. This option involves comparing collected data to RISC default closure levels to determine if further investigative work is necessary. VRP participants must provide any and all screening information in the investigation report or remediation work plan as detailed in Appendix 1 of the RISC User's Guide. For sites involving petroleum contamination from a discrete source (such as an underground or above ground tank), Appendix 4.2 of the RISC User's Guide provides a two-step procedure for screening subsurface soils. Regardless of a VRP participant's performance or nonperformance of area screening, confirmation sampling will still be required to verify environmental conditions to achieve VRP project closure through the Covenant Not To Sue.

The purpose of screening is to determine the presence of contaminants at concentrations exceeding the RISC closure levels. VRP participants with a high level of confidence that the proposed VRP project area will pass RISC default screening evaluations can proceed to obtain closure through area screening. Because only discrete (noncomposited) samples may be used for confirmation sampling of volatile chemicals,

the Chen Test is the default method for confirmation sampling of volatile compounds. For non-volatile compounds, either the Max Test or the Chen Test may be used. (See Chapter 6 of the RISC Technical Guide.)

The VRP participants must coordinate split confirmation sampling. If confirmation sampling results demonstrate compliance with remediation objectives, the participant may achieve closure. In this case, the determination of the nature and extent of contamination is not required. Participants who have information that suggests that the area is contaminated at concentrations exceeding RISC default closure levels may forgo area screening and proceed to a determination of the nature and extent of contamination and eventually project closure. VRP participants who do not have a strong historical basis to judge an area's environmental concerns should conduct area screening to narrow the focus of any remedy required.

Ground water screening may not be necessary for projects with adequate demonstration that ground water liability coverage is not necessary. However, if ground water is to be included in liability coverage, a thorough determination of the nature and extent of possible ground water contamination and any necessary remediation must be completed prior to the issuance of a Certificate of Completion and Covenant Not To Sue. Ground water screening is insufficient for closure in VRP.

4.7.3 Investigation

All reporting requirements identified in the Investigation Report (see Appendix 1.1 of the User's Guide) apply. Any presampling or screening information should be included in the investigation report. VRP participants can either submit an investigation work plan or an investigation report (see Appendix 1.1). Regardless of which type of document is submitted, VRP participants are asked to provide three copies to the VRP project manager to facilitate technical review. The VRP will provide technical comments within approximately 60 days. VRP participants who elect not to submit an investigation work plan or investigation report must document the objectives, rationale, and procedures followed during the investigation, and investigation findings in the voluntary remediation work plan.

4.7.4 Remediation Work Plan Preparation

The primary purpose of the remediation work plan is to provide a basis for IDEM to evaluate the remedy proposed for the project. In addition, the remediation work plan is subject to a 30-day public notice period, which serves to inform interested parties of the remedial plans.

Participants must comply with any VRP public participation standards or guidance applicable to the VRP. The remediation work plan also establishes the schedule for implementation of remedial activities, which allows IDEM to coordinate oversight activities with the participant. VRP participants must submit four copies of the remediation work plan to the assigned VRP project manager for technical review. All reporting requirements identified in Appendix 1.2 for the remediation work plan are also required.

The remediation work plan must specify project closure objectives. If the objectives are less stringent than residential standards (for example, commercial/industrial standards), the remediation work plan must also specify the property uses that must be restricted to be consistent with the assumptions used to generate the closure objectives. Satisfaction of the Ground Water Quality Standards Rule, 327 IAC 2-11, does not necessarily eliminate the need for property or land-use restrictions or other remedial action.

4.7.5 Community Relations Plan Preparation

Meaningful community participation is necessary for the success of any environmental remediation. Participants are encouraged to formulate a community relations plan (CRP), in cooperation with the IDEM project manager, in order to inform the community about the project as well as respond to public questions. In addition to the formal processes described in the CRP, many VRP participants find that informal meetings and discussions are effective in preventing complications sometimes caused by an uninformed public. Such meetings are especially appropriate for neighbors and sensitive community institutions. The CRP should address the needs of both the VRP participant and the community and must be consistent with the VRP's community relations nonrule policy, OLQ-XXXX-NPD, 20 IC XXXX (Month X, 2000).

4.7.6 Remediation Work Plan Implementation

The VRP participant must notify IDEM within 60 days of work plan approval of the intent to proceed with plan implementation. Commencement of the work contemplated in the work plan before the work plan is approved is done at the participant's risk. Oversight of the remediation work plan is accomplished through a combination of written progress reports and IDEM field oversight. A schedule for progress reporting is required in the remediation work plan.

4.7.7 Remediation Progress and Compliance Reporting

If remediation is necessary, all reporting requirements detailed in Appendix 1.3, Remediation Progress Report, are required. However, if remediation is not warranted because constituents are present below either background or the closure levels specified in the remediation work plan, this reporting requirement is not applicable.

Remediation progress reports (see Appendix 1.3) update the VRP project manager and other interested parties about the remedial activities. These reports shall be submitted at least quarterly. Confirmation samples (split with the VRP) are required to be collected to verify that the specified closure levels have been achieved. Three copies of each remediation progress report should be submitted to the VRP project manager.

4.7.8 VRP Closure Site Location Information

Accurate site location information is required for all VRP sites before the Certificate of Completion can be issued. This information is used in the Certificate of Completion and its attachments to accurately identify the site location. For this purpose, a clean (absent of all headers, footers, and watermarks) legal description of the site must be provided. At a minimum, Universal Transverse Mercator (UTM) coordinates for property access points along the property boundary (such as a driveway or property gate) must be provided. Additionally, the participant must accurately delineate the source areas addressed in the remediation work plan, regardless of whether they are within or outside of the facility boundary.

Accurate information must be provided for all UTM coordinates, regardless of how they are collected. VRP staff may provide this service if requested by the participant. More information may be required for certain remedial projects.

The participant may either choose to professionally survey the specific area or request that the VRP establish the boundaries of the area(a) using a global positioning system (GPS) instrument. Manufacturer specifications and internal IDEM guidance on use of GPS instruments is on file at IDEM. Although IDEM's use of GPS instruments is not a registered professional survey, it will provide the area locations with acceptable accuracy.

4.7.9 Land Use Restrictions

The VRP requires a land-use restriction for all affected properties (both on-site and off-site) not demonstrated to have achieved residential cleanup objectives. A land-use restriction is a way to ensure the continuing viability of land use and exposure assumptions made during the selection of the remedy in the remediation work plan. A land-use restriction often comes in the form of a deed restriction, a land-use rights agreement (that is, the grant or surrender of ground water use or developmental rights), or, in some cases, a law or ordinance. At a minimum, future land use of the property should be restricted to industrial uses for sites that do not satisfy residential closure objectives.

Land-use restrictions proposed by a participant must be **enforceable** and must have a degree of **permanence**. In addition, a land-use restriction must provide the public with **constructive notice** about the existence of the land-use restriction. U.S. EPA's "Land Use in the CERCLA Remedy Selection Process" guidance document (Appendix 7 of the Technical Guide) provides further discussion.

Enforceability ensures that land use that violates the use restriction can be stopped. Constructive notice ensures that all people are deemed to have knowledge of the land-use restriction and is often accomplished by recording a document in the County Recorder's office. All people are deemed to have constructive notice of laws, administrative rules, and ordinances. Constructive notice (1) ensures that occupants, prospective purchasers, and lenders are aware of the use restriction and (2) facilitates use consistent with the land-use assumptions. Types of land-use restrictions that provide constructive notice include recorded instruments, laws, rules, and ordinances. Because an environmental notice is not enforceable, it typically is not sufficient for VRP purposes as a land-use restriction. Similarly, zoning, while an ordinance, is not permanent enough to qualify as a land-use restriction because zoning restrictions are easily changed and variances are often freely granted.

The remediation work plan must specify land-use assumptions made in remedy selection; however, the specific type of land-use restriction need not be specified. All land-use restrictions for off-site properties must be in place when the closure report is submitted. Land-use restrictions for on-site properties must be in place before the Certificate of Completion is issued except for restrictions that are recorded instruments.

The VRP allows on-site deed restrictions or other instruments to be recorded simultaneous with the Certificate of Completion. The VRP also allows the participant to decide when the land-use restriction is

put in place. Failure to secure a land-use restriction is a cause for denial of project closure. The VRP encourages participants to work with their project managers to select the appropriate land-use restriction for a site and to be inventive in developing use control strategies.

4.7.10 Project Completion

Closure Requirements

- ✧ Confirmation sampling
- ✧ Submission of Closure Report
- ✧ Initiation of any off-site institutional controls
- ✧ Recordation of Certificate of Completion and any on-site institutional controls

Guidance on closing VRP sites is presented in the RISC Technical Guide, Chapter 6. Consistent with RISC policy, the VRP will issue a Certificate of Completion when a permanent remedy ensures that contaminant levels meet the respective closure values and when ground water monitoring demonstrates that the ground water continues to meet closure values after eight consecutive quarters of ground water monitoring. Closure with institutional controls may be granted when it is demonstrated that the ground water plume is stable or shrinking. Demonstration of plume stability requires 3 to 7 years of monitoring for petroleum releases and 7 years of monitoring for chemical releases. However, with IDEM concurrence, the participant may propose alternative models for plume dynamics to demonstrate a stable or shrinking plume in less time.

VRP policy requires that confirmation samples be split with IDEM for all project closures as an independent verification that conditions meet closure criteria. If a participant enters the VRP before the nature and extent of contamination has been determined, the participant may request that IDEM split samples with them during optional project screening or investigation activities if contaminant levels are not expected to exceed RISC default closure levels. This strategy will prevent the added expense of remobilizing sampling crews to demonstrate closure. Of course, if confirmation sampling results do not meet remediation objectives, more remediation work will be required, along with subsequent confirmation sampling. If remediation is required, confirmation samples will be collected after completion of the remedial process to confirm closure.

If a project enters the VRP after remediation is complete or after an investigation suggests that no further action is required, IDEM will still require the collection of a limited number of confirmation samples as an independent verification that conditions conform to closure levels. In this case, the intent of confirmation sampling is not to recharacterize the area(s) but rather to confirm previously submitted data.

Some VRP projects may require off-site land-use restrictions. Consistent with Section 4.7.9 of this chapter, separate land-use restrictions are required under the VRP for all properties affected by on- and off-site contamination. Although the remediation work plan need only indicate what type(s) of land-use restrictions will be placed on the affected properties, evidence of the placement of off-site land-use restrictions must be submitted to IDEM before the Certificate of Completion is issued. On-site land-use restrictions may be recorded concurrent with the Certificate of Completion. Evidence of recording, such as an affidavit or file-stamped deed restriction, can be provided as proof that a deed restriction was recorded for all affected property.

4.7.11 Closure Report Preparation

When a project is completed, the VRP participant will be asked to submit a closure report (see Appendix 1.4). All itemized reporting requirements identified in the closure report outline format in Appendix 1.4 apply. Three copies of the closure report must be submitted to the VRP project manager for review.

The primary purpose of the closure report is to document the completion of activities identified in the remediation work plan. The closure report must also demonstrate that all land-use restrictions for off-site affected property are in place. The closure report provides important information about the performance of the remediation system, how the project area was restored following remediation, and other information necessary to demonstrate that the remediation was successful. Section II of the closure report requires comparison between VRP-collected split sample results and participant-collected split sample results. Prior to closure report submission, the participant should contact the VRP project manager and request confirmation sample results. In addition to these reporting requirements, the participant must demonstrate the notification of parties as required by the community relations nonrule policy document, OLQ-XXXX-NPD, 20 IC XXXX (Month X, 2000). A copy of the written notification and a list of recipients must be provided as an attachment to the closure report.

Upon receipt of the closure report, IDEM may schedule a final site inspection. If the report and inspection confirm that remediation is complete, IDEM will prepare a Certificate of Completion and a Covenant Not To Sue for the remediated areas and activities.

4.7.12 Issuance of Certificate of Completion

Once the voluntary remediation project has been successfully completed and payments to IDEM have been made for all billed oversight costs, IDEM will issue the Certificate of Completion. The Certificate of Completion and any on-site land-use restrictions must be recorded with the County Recorder. Once IDEM has received proof of the recorded Certificate of Completion and all oversight payments, IDEM will prepare a Covenant Not To Sue for the Governor's Office. In accordance with IC 13-25-5-18(a), the Covenant Not To Sue bars suit against the participant and successors in title to the VRP site for claims arising under Chapter 13 of the Indiana Code for matters addressed in the remediation work plan. In addition, pursuant to IC 13-25-5-20(b), the program participant, upon receipt of the Certificate of Completion, is not liable for claims for contribution concerning matters addressed in the remediation work plan.

The provisions of the VRA are satisfied when IDEM gives the participant written notice, in the form of a Certificate of Completion, that it has demonstrated to IDEM's satisfaction that all of the terms of the VRA have been completed, including the selection and implementation of a remedial action. The participant remains responsible for record preservation and payment of any remaining administrative costs.

A person who receives a Certificate of Completion shall file a copy of the certificate and its attachments to the recorded deed for the property in the Recorder's Office of the county in which the remediation took place. In addition, the participant must ensure that any land use restrictions are in place. A deed restriction or other recorded land use restriction for on-site property can be recorded simultaneously with the Certificate of Completion. The County Recorder's Office for the county in which the VRP project is located can provide specific guidance on recording issues as well as written proof of the recording.

4.7.13 Issuance of Covenant Not To Sue

After successful project completion, the Governor's Office will issue the Covenant Not To Sue for the contaminants listed in the remediation work plan. Only listed contaminants will be reflected in the attachments to the Covenant Not To Sue. Prior to the issuance of the Covenant Not To Sue, proof of recording of the Certificate of Completion must be provided to the VRP project manager. Upon receipt of written proof of the recording, the VRP will prepare a Covenant Not To Sue and forward it to the offices of the Attorney General and the Governor for signature. By statute and by its own terms, the covenant protects the recipient of the Certificate of

Completion and any party who subsequently acquires the subject property. Upon issuance, neither IDEM nor a third party can bring an action against the participant under the State's environmental laws (Title 13 of the Indiana Code) for matters addressed in the remediation work plan.

The covenant does not relieve the participant of all liability. The participant may still be liable for post-closure or corrective action requirements under RCRA, natural resource damages, nuisance, trespass, and other common law claims, and criminal actions. In addition, the State may not release a participant from liability with regard to CERCLA claims. Although the Memorandum of Agreement states U.S. EPA's policy, it does not and cannot stop suits brought by third parties pursuant to CERCLA for contribution actions against a participant. However, an action for contribution under CERCLA can only be brought for actual response costs incurred by a third party. The likelihood of such a claim is slight for most VRP projects.